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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER SPOONER, LAMONT M				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/530,200

Applicant(s)

ASANO ET AL.

Examiner

LAMONT M. SPOONER

Art Unit

2626

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4, 7-27 and 30-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 7-27 and 30-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-843)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/21/08
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Introduction

1. This office action is in response to applicant's amendment filed 12/19/07. Claims 1, 4, 7-27 and 30-33 are currently pending.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/13/08 has been entered.

Response to Arguments

3. Applicant's arguments, filed on 5/13/08, with respect to claims 1, 17, 25, 27, 31 and 33 have been considered but are moot in view of the new ground(s) of rejection.

4. Applicant's arguments filed 5/13/08 have been fully considered but they are not persuasive.

Regarding claims 1, 4, 7-24, 27 and 30-32, applicant argues, "The cited art does not disclose or suggest re-conversion processing to convert the same language representation to another representation for processing."

However, the Examiner cannot concur. It is evident in Yamauchi et al. (Yamauchi, 5,652,896), that there he teaches re-conversion processing to convert the same language representation to another representation for processing in C.49 line 30-C.50 line 56. In the previously cited section, Yamauchi explicitly teaches from a confirmed first language representation, C.49 lines 32-40-his source-language sentence, created, C.50 lines 24-49, his plurality of source language sentences generated and one selected, thus confirmed, there is a re-conversion, and edit to the source sentence, C.50 lines 45-55, and through this re-converted source language sentence, there is further processing to generate a translated sentence, C.50 lines 55-57, his final result, "They tested a transformer station."

5. In response to applicant's arguments, regarding claims 25, 26 and 33, against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208

USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231

USPQ 375 (Fed. Cir. 1986).

Applicant argues, "Yamauchi and Fushimoto do not disclose..." and "the system in Yamauchi would have the translation to English and a separate translation to German based on the Japanese input not the English confirmation of the translation as claimed." and "On the other hand, in the case where translation from Japanese to German is assumed, Englis-German translation has generally accuracy higher than Japanese-German translation in automatic translation by machine. Accordingly, in the case where a user is also familiar...there can be also realized a system configuration to carry out conversion of representation by first carrying out translation from the Japanese to the English to allow user to confirm its result to translate it into German." The Examiner notes, this explanation is not claimed, wherein there is no claim to translate from one language to a second language and then translate from that language to another language. The Examiner further notes, there is no connection between the second and third languages as claimed, although the applicant argues "Japanese to English to allow user to confirm its result to translate it into German." Which does not specify what is directly being translated into

German, Japanese, or English, applicant simply argues, translating "it" into German. The Examiner notes there is claimed a second language representation in a first language that is to be translated (see claims 25 and 26) and there is a third language representation in a first language, however, there is no use of the third language representation that involves the second language representation or language to be translated anywhere in the claim as argued.

Applicant further argues, "Additionally the reference Fushimoto cannot be relied upon to cure the deficiencies of Yamauchi."

The Examiner cannot concur with the above argument as it is unpersuasive, as Fushimoto is relied upon to teach the second and third languages as different languages. Therefore, in combination with the specific embodiment as cited in the previous rejection of Yamauchi, which teaches an input (C.50 lines 6-10), a conversion (C.50 lines 15-33), a re-confirmation-Fig. 67 item 31, a re-translation-fig. 67 item 33, a re-confirmation-Fig. 67 item 34, and a re-translation-fig. 67 items 35/36, thus there is provided, in combination with Fushimoto which teaches a first to second, and second to third language translation (C.7 lines 25-31, C.5 lines 40-45), a means for a representation by a third language when Fushimoto

is combined with Yamauchi, wherein Yamauchi teaches the conversion representations of a language, and Fushimoto teaches having a third language, and routing a translation from a first, to a second and the second to the third language, wherein the second and third languages are different. Yamauchi teaches the confirming means, and generating the representations of source languages based on another language and translating and retranslating from the confirmed representation. Thus one ordinarily skilled in the art, at the time of the invention, would have been able to incorporate a second (taught by Yamamoto, Fig. 67-his C.50 lines 25-45) and third language representation (by using the motivation of having a chain translation of first to second to third from Fushimoto), and obtain a final translation from the first language. Thus, as claimed, the Examiner's is unable to remove the previous rejection.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 1, 4, 7-24, 27, 30-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamauchi et al. (US 5,652,896).

8. As per **claims 1 and 27**, Yamauchi et al. discloses an apparatus comprising:

input means for inputting a first natural language (C.10.lines 30-32);
converting means for converting the first natural language inputted by the input means into a plurality of representations within the same first natural language (Fig. 88-his cursor in a menu box containing a plurality of converted representations in the same natural language of a first natural language input, C.19-C.20-his plurality of representations in his source language, Japanese, C.50 lines 34-45-his plurality of representations in the source language as intermediate structures (S), instead of target language patterns generated from source language, C.10.line 53, C.11.line 48-55-intermediate structure), the plurality of representations replacing postpositional words of the first natural language (ibid, Fig. 73, 74, Fig. 88, the Examiner notes, postpositional phrases/words, all are included first natural language, and are replaced in order to develop his plurality of representations in the first natural language, C.20 lines 13-62-describe alternate words replacing postpositional words, and having "sem" left over

in a pattern, functioning as an auxiliary, however, does not teach having a source language that precludes postpositional phrases from being replaced by another representation, furthermore the entire source language sentence is processed, including postpositional phrases, C.20 lines 61-67, and may be replaced, C.21 lines 18-25-his "sem"/postpositional word and further word creation to the structure);

confirmation means for confirming at least one representation converted by the converting means as being closest in meaning to the inputted first natural language (Fig. 88 his cursor providing confirmation means for closest in meaning of one of a plurality of representations of an input, C.50 lines 45-47-his selection as the intended/inherent closest in meaning, C.13.lines 44-50-generations of the intermediate structure (S) from the source input, C.38.lines 27-29);

re-converting means for re-converting the at least one representation to a re-converted representation (C.50 lines 24-49, his plurality of source language sentences generated and one selected, thus confirmed, there is a re-conversion, and edit to the source sentence, C.50 lines 45-55-re-converted source language sentence through the positioning and editing of the converted source language sentence);

processing means for translating the re-converted representation confirmed by the confirmation means to a second natural language (C.50 lines 45-57, his translation of the re-converted sentence); and

output means for outputting the second natural language processed by the processing means (ibid, C.38.lines 55, 56).

As per **claim 4**, Yamauchi et al discloses all of the limitations of claim 1, upon which claim 4 depends. Yamauchi et al. further discloses:

the processing means carries out processing by template (Fig 28-the template-corresponding to processing means for translation).

As per **claim 7**, Yamauchi et al. discloses all of the limitations of claim 1, upon which claim 7 depends. Yamauchi et al. further discloses:

the converting means further converts the first natural language inputted by the input means into third language (C.38.lines 7-9-retranslation is interpreted as a third language from a first language, C.37.lines 39-59, in addition C.52.lines 35-38-Kana to Kanji to English conversion).

As per **claim 8**, Yamauchi et al discloses all of the limitations of claim 1, upon which claim 8 depends. Yamauchi et al. further discloses:

the converting means converts plural representations into single representation with respect to representation of natural language inputted by the input means (C.14.lines 17-22).

As per **claim 9**, Yamauchi et al discloses all of the limitations of claim 1, upon which claim 9 depends. Yamauchi et al. further disclose:

the converting means converts polysemous representation into plural univocal representations with respect to representation of natural language inputted by the input means (C.14.lines 50-61).

As per **claim 10**, Yamauchi et al. discloses all of the limitations of claim 1, upon which claim 10 depends. Yamauchi et al. further discloses:

the converting means carries out conversion by at least one of merger (integration), division, deletion, replacement and exchange of order with respect to representation of natural language inputted by the input means (C.21.lines 60-67, C.22.line 48-C.23.line 16-replacement and deletion with respect to the source language is done with the reference sentence with respect to the intermediate structure).

As per **claim 11**, Yamauchi et al. discloses all of the limitations of claim 1, upon which claim 11 depends. Yamauchi et al. further discloses:

the input means inputs natural language by speech (C.37.lines 42-45).

As per **claim 12**, Yamauchi et al. discloses all of the limitations of claim 11, upon which claim 12 depends. Yamauchi et al. further discloses:

the confirmation means confirms, only once, natural language inputted by speech to the input means (C.37.lines 42-45, C.38.lines 40-56).

As per **claim 13**, Yamauchi et al. discloses all of the limitations of claim 1, upon which claim 13 depends. Yamauchi et al. further discloses:

the input means inputs natural language character by character (C.37.lines 42, 43-keyboard input).

As per **claim 14**, Yamauchi et al. discloses all of the limitations of claim 13, upon which claim 14 depends. Yamauchi et al. further discloses:

the confirmation means confirms, only once, natural language inputted by character at the input means (C.37.lines 42, 43 C.38.lines 40-56).

As per **claims 15**, Yamauchi et al. discloses all of the limitations of claim 1, upon which claim 15 depends. Yamauchi et al. further discloses:

the first natural language is inputted to the input means (see claim 1), the converting means converts first language inputted via the input means

into a second representation of the second language and converts it into first representation of the first language having one-to-one correspondence with respect to the second representation, and the confirmation means carries out confirmation by using the first representation (C.38.lines 24-35).

As per **claims 16 and 30**, Yamauchi et al. discloses all of the limitations of claim 15, upon which claim 16 depends. Yamauchi et al. further discloses:

the processing means translates the first language into the second language on the basis of conversion at the converting means and confirmation at the confirmation means and the output means outputs the second language translated by the processing means (C.38.lines 24-56).

As per **claim 17 and 31**, Yamauchi et al. discloses a natural language processing apparatus comprising:

input means for inputting natural language (C.15.lines 25-27, C.37.lines 39, 40);

a plurality of processing means for implementing processing of the natural language (C.10.lines 44-67, C.11.lines 48-55, C.37.lines 42-45, speech input processing and analysis processing, Fig. 115 text editor processing), at least one processing means configured to convert the first

natural language inputted into a plurality of representations of the natural language (Fig. 88-his cursor pointed at the plurality of representations, C.50 lines 34-45-his plurality of representations in the source language as intermediate structures (S), instead of target language patterns generated from source language) and to re-convert the plurality of representations into a plurality of re-converted representations of the natural language (C.50 lines 24-49, his plurality of source language sentences generated and edit to the source sentences, C.50 lines 45-55- produce his re-converted source language sentences through the positioning and editing of the converted source language sentence);

a plurality of confirmation means for confirming result of processing with respect to the natural language (Fig. 61-input confirmation in the edit area, C.38.lines 25-30-input sentence structure), at least one confirmation means configured to confirm at least one representation being closest in meaning to the inputted first natural language (Fig. 88-his cursor to the closest/intended meaning, C.50 lines 45-47 further confirmation means); and

output means for outputting the processed natural language (C.37.lines 55-59, C.50 lines 45-47),

wherein a second processing means for converting the natural language and a second confirmation means for confirming result of the second processing (C.38.lines 40-45-second processing including information retrieval processing by natural language wherein the confirmation is the user selection of a presented word-to-word translation, C.38.lines 1-9, 16, 17, which includes retrieval processing by the natural language input) means are provided at a stage preceding a first processing means to thereby carry out execution in advance of confirmation of the first processing means to delete confirmation of result of the first processing means (Fig. 78-step 19, step 20, Fig. 79 steps 25, 26...Yamakita provides multiple confirmation means, however, in advance of his step 26, contains an operation to delete confirmation-his deletion by selecting "Y" which makes null the previous confirmation/taken as deletion, and provides a current confirmation translation).

As per **claim 18**, Yamauchi discloses all the limitations of claim 17, upon which claim 18 depends. Yamauchi et al. further discloses:

processing by the first processing means is machine translation processing, kana-kanji conversion processing, information retrieval processing by natural language, or representation conversion processing

by natural language (C.38.lines 40-56- translating being the first processing means, and the translation is displayed).

As per **claim 19**, Yamauchi et al. discloses all of the limitations of claim 17, upon which claim 19 depends. Yamauchi et al. further discloses:

processing by the second processing means is machine translation processing, kana-kanji conversion processing, information retrieval processing by natural language, or representation conversion processing by natural language (C.38.lines 40-45-second processing including information retrieval processing by natural language wherein the confirmation is the user selection of a presented word-for-word translation of natural, C.38.lines 1-9, 16, 17, which includes retrieval processing by the natural language input).

As per **claim 20 and 32**, Yamauchi et al. discloses all of the limitations of claim 17, upon which claim 20 depends. Yamauchi et al. further discloses:

at a stage preceding the second processing means (the speech or OCR input necessarily precedes the above cited second processing means), a third processing means and third confirmation means for confirming result thereof (speech input or OCR input and confirmation

thereof in the input Edit section, C.37.lines 39-44, Fig 61 "Editing", "Japanese", "original"), wherein the third confirmation means is coupled to the portion after the second or subsequent processing means, or wherein the third confirmation means is merged or integrated into the second confirmation means or confirmation means of the stage succeeding thereto to carry out postponement of confirmation (C.37.lines 39-55, Fig. 65 items 21, 26, Fig 85 items 62, 66, the speech or OCR input and confirmation means are coupled to the information retrieval from the information recording unit which contains a plurality of information databases, which inherently provides, until the input is confirmed-the process of receiving the input by speech and confirming by selection of the input to be implemented in another process, postponement of the machine translation is carried out).

As per **claim 21**, Yamauchi et al. discloses all of the limitations of claim 20, upon which claim 21 depends. Yamauchi et al. further discloses:

the second confirmation and the third confirmation means are merged or integrated gives result of processing as numeric value to present the numeric value (C.19.lines 49-57-the recognized and confirmed words

inputted and confirmed integrated identified processed natural language for retrieval, have calculated scores).

As per **claim 22**, Yamauchi et al. discloses all of the limitations of claim 20, upon which claim 22 depends. Yamauchi et al. further discloses:

the first processing means carries out machine translation (C.37.line 50) and the third processing means carries out speech recognition (C.37.lines 44, 45).

As per **claim 23**, Yamauchi et al. discloses all of the limitations of claim 20, upon which claim 23 depends. Yamauchi et al. further discloses:

speech recognition processing means for carrying out speech recognition of natural language inputted to the input means (C.37.lines 43-45), recognition result confirmation means for confirming recognition result at the speech recognition processing means (C.51.line 63-C.52.line 15-input editing means, wherein the input is confirmed by selection), machine translation means for implementing machine translation to the result confirmed at the recognition result confirmation means, (C.37.line 48), and translation result confirmation means for confirming translation result at the machine translation means (C.37.lines 55-59).

wherein representation conversion processing means for converting representation and representation conversion confirming means for confirming result of the conversion (C.10.lines 30-32, C.13.lines 44-50, C.23.lines 26-59, C.32.line 59-C.33.line 6, C.38.lines 27-29) thereof are supplemented at the preceding stage of the machine translation processing (C.23.lines 41-59) means to thereby carry out execution in advance of processing by the translation result confirmation means (C.23.lines 58, 59) to omit the translation result confirming means of the stage succeeding to the machine translation processing means (C.23.lines 58, 59, Fig. 28, Fig. 29-the translation confirming means has been omitted by the confirmation of the original input sentence conversion means-the confirmed sentence is translated without further confirmation, C.23.line 59, "the translation is completed").

As per **claim 24**, Yamauchi et al. discloses all of the limitations of claim 23, upon which claim 24 depends. Yamauchi et al. further discloses: postponement of processing by the recognition result confirming means which merges or integrates the recognition result confirmation result with the representation conversion result confirming means existing at the stage succeeding thereto is carried out (C.37.lines 39-55, Fig. 65 items 21,

26, Fig 85 items 62, 66, the speech input and confirmation means are coupled to the information retrieval from the information recording unit which contains a plurality of information databases, which inherently provides, until the input is confirmed-the process of receiving the input by speech and confirming by selection of the input to be implemented in another process, postponement of the machine translation is carried out).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 25, 26 and 33 rejected under 35 U.S.C. 103(a) as being unpatentable over Yamauchi in view of Fushimoto (US 5,742,505).

As per **claims 25 and 33**, Yamauchi et al discloses a natural language apparatus comprising:

input means for inputting a first natural language (C.15.lines 25-27, C.37.lines 39, 40);

converting means for converting the first natural language inputted to the input means into a plurality of representations of the first natural

language (Fig. 88-his menu of items) having one-to-one (C.38.lines 1-4) correspondence with respect to a representation of second language (C.50 lines 37-45) and a representation of a third language (C.38.lines 4-5, his second translation, Fig. 67-his re-translation and user selections as the representations, each retranslation selection unit as a second and third representation);

confirmation means for confirming the representation of the third language converted at the converting means as being the closest in meaning to the inputted first natural language (Fig. 88-his cursor to the item representing the closest in intended meaning, C.38.lines 24-35-confirmation of second translation, Fig. 67 items 31 and 34);

processing means for implementing processing to the first natural language inputted at the input means in accordance with result of the confirmation at the confirmation means (C.37.lines 39-59-matching language processing to the input, in accordance with the result confirmation unit, 24); and

output means for outputting the first natural language to which the processing has been implemented at the processing means (C.37.lines 58, 59).

Yamauchi lacks explicitly teaching the third language being different from both the first and second languages. However, Fushimoto teaches the third language being different from both the first and second language (C.7 lines 25-31). Therefore, at the time of the invention, it would have been obvious to one ordinarily skilled in the art to modify Yamauchi's second language representation with a third language representation, the third language being different from both the first and second languages, providing the benefit of using an intermediate language to translate from a first language to a second, providing there is a better translation between the first and third language, wherein the third language can further be accurately translated into the desired second language.

As per **claim 26**, Yamauchi et al. with Fushimoto disclose all of the limitations of claim 25, upon which claim 26 depends. Yamauchi et al. further discloses:

at the converting means, the second language is language to be translated (C.38.lines 6, 7-first retranslation portion-second language is to be translated), and representation by the third language is obtained by conversion of representation by the first language (C.38.lines 6-9-

retranslation resulting in the third language results from the first input language, C.37.line 39-C.38.line 9).

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAMONT M. SPOONER whose telephone number is 571-272-7613. The examiner can normally be reached on 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lms
8/26/08

/Patrick N. Edouard/
Supervisory Patent Examiner, Art Unit 2626